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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,510	09/16/2003	Gael Bouchy	242818US6	1360

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EXAMINER	
BINDA, GREGORY JOHN	

ART UNIT	PAPER NUMBER
3679	

DATE MAILED: 01/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/662,510	BOUCHY ET AL.	
	Examiner	Art Unit	
	Greg Binda	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5,6,8 and 10-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5,6,8 and 10-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 October 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. The substitute specification filed October 26, 2005 has been entered.

Election/Restrictions

3. Applicant elected Species I shown in Fig. 5 and timely traversed the restriction (election) requirement in the reply filed on March 22, 2005.

Drawings

4. The drawings are objected to because:

a. Reference numeral 54 is used to identify a feature in Fig. 3A and then reused to identify modifications of said feature in Figs. 3B & 3C, Such usage is proscribed. See MPEP § 608.02(e).

b. Reference numeral 80 appears in Fig. 4, but is not mentioned in the specification.

Specification

5. The disclosure is objected to because:

a. Page 1, line 18 includes the nonsensical term, "a locally zone of weakness"

b. Throughout the specification the term "fusible" is used in way that is repugnant to its usual meaning. See item 8c below.

c. The word "center" is misspelled throughout the specification.

d. Page 7, line 14 includes reference numeral 60, but the reference numeral does not appear in the drawings.

e. Page 7, line 15, the term "orifice 12" should be changed to "orifice 42".

f. Page 7, line last and page 8, lines first state that the fusible screws 54 are incapable of resisting fatigue for a given applied load. Does this mean the fusible screws 54 are subject to degradation by fatigue under the most infinitesimal load? If not, then how much load can they resist and still be described as incapable of resisting fatigue?

g. The description contradicts itself. At page 10, lines 15 & 16, rupture of the decoupling device is described as being "caused by rupture of the fusible screws 54". However, at page 9, lines 24+, rupture of the decoupling device is described as being caused by rupture of the structural screws 72.

h. Page 11, line 19, "line 40" should be changed to "line 240".

Claim Rejections - 35 USC § 112

6. Claim 21 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 21, lines 7 & 8, recites the limitation, "the intermediate casing comprising a surface portion configured to abut a portion of a surface of the flange [of the casing]". Applicant has not pointed out where this limitation is supported, nor does there appear to be a written description of the limitation in the application as originally filed. To the contrary, the specification teaches that the

intermediate casing 14 is connected to the casing 15 by a link 17 (see page 6, line 8), not by "a surface portion" and/or "a portion of a surface".

7. Claims 1, 2, 5, 6, 8 & 10-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 1, lines 10 & 11 recites the limitation, "the second structural members are designed to break only when the load applied to the decoupler reaches a given predetermined [tensile] load" (see page 7, line 23). Claim 21 recites the same limitation in lines 13-15. The specification fails to disclose how this is accomplished. Unlike the first "fusible" member 54 which are disclosed with weakened zones 64, the second rupture members 72 are disclosed with no such rupture causing feature. Therefore undue experimentation would be required of one skilled in the art to make and/or use the claimed invention.

8. Claims 1, 2, 5, 6, 8 & 10-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 1, line 5 recites the limitation, "a first set of first rupture members" which suggest there is more than one such set. However, no second (or other) set of first rupture members is recited.

b. Claim 1, line 5 recites the limitation "first rupture members called fusible rupture members". It is not clear what this means. Who is calling the first rupture members "fusible rupture members"? Are the first rupture members fusible? Or are they just "called" fusible? If they aren't fusible, then why are they called fusible?

c. While applicant may be his own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "fusible" is used by the claims (see claim 1, line 5 and claim 21, line 10) to mean "capable of tensile rupture" (see page 7, lines 1-7), while the accepted meaning is "capable of being liquefied by heat". See *Webster's Dictionary* definition of the term "fusible".

d. Claim 1, line 7 recites the limitation "a second set of second rupture members" but no first such set is recited.

9. Claims 19 & 21 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are those which make the load applied a tension load. Petrie et al, US 3,395,857 (Petrie) shows a decoupler comprising every limitation of the claims, but according to applicant on page 17 of the amendment filed Oct 26, 2005, Petrie fails to show the structure which make the load applied a tension load. If that is the case, then the structure required to make the load a tension load must not be recited in the claims.

Claim Rejections - 35 USC § 102

10. Claims 1, 5, 6, 8, 10, 12 & 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Petrie. Figs. 1 & 2 show a tension decoupler device connecting two parts 18 & 22 of a structure and fitted with rupture members 23, 30, the rupture of which cause decoupling of the parts when they break, the device comprising: a first set of "fusible" rupture members 23 arranged parallel to each other; and a second set structural rupture members 30 arranged parallel to each other and to the first fusible rupture members. Figs. 1 & 2 show the first rupture members 23 and the second rupture members 30 are distributed around a circular flange 21 and that each fusible rupture member 23 is located between two structural rupture members 30. In col. 2, lines 50-56, Petrie discloses the first members 23 will break before the second members 30.

Claim Rejections - 35 USC § 103

11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petrie. Petrie shows all the limitations of the claim, but does expressly disclose the number of fusible and structural members being equal. However, applicant has not disclosed that having the numbers equal to each other solves any particular problem or is for any other particular purpose. Also, it appears the decoupling device would perform equally well with the numbers not being equal. As such, using equal numbers of fusible and structural member is deemed to be a design consideration which fails to patentably distinguish over the prior art to Petrie.

12. Claims 11 & 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petrie in view of Mulquin, US 3,304,031. Petrie shows first rupture members 23, but does not expressly disclose each as having a reduced cross section or a removed portion. Mulquin shows fusible rupture members having removed portion (see Figs. 2, 3 & 7) and reduced cross section (see Figs. 4-6). In col. 1, lines 57-63, Mulquin teaches that a removed portion and/or reduced cross section provides a simple and inexpensive fusible member that ruptures under tension. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the decoupler device of Petrie by making the fusible rupture members with removed portions or reduced cross section in order to provide simple and inexpensive fusible members that rupture under tension as taught by Mulquin.

Response to Arguments

13. Applicant's arguments filed Oct 26, 2005 have been fully considered but they are not persuasive.

a. Applicant argues that the 112(1) enablement rejection is invalid because one skilled in the art would know how to make the second rupture members so that they break only at a given predetermined load. If that is the case, then why has applicant taken so much effort to disclose how to make the first "fusible" members so that they rupture at a predetermined load? How is that the second rupture members 72 are allowed to be standard unmodified fasteners, but the first members 54 require all manner of structural modification to accomplish the same task supposedly accomplished by the second

members? Why would anyone go through the trouble of making first rupture members 54, if a readily available standard fastener were available to accomplish the same task

b. Applicant argues that the 112(1) enablement rejection is invalid because all fasteners are designed to break at a particular tensile load. However, applicant provides no evidence to support that allegation. Standard fasteners (e.g. the so-called "second rupture members 72") are marketed by size, not by their tensile strength (see *MSC*). There is no evidence to suggest standard fasteners they are designed to *reliably* rupture at particular (i.e. predetermined) tensile load. Although every fastener will necessarily break under some tensile load, that does not mean every fastener is designed to break at a predetermined tensile load.

c. Applicant argues that Petrie fails to show the claimed invention because it fails to expressly disclose that the rupture members 30 break after the members 23. However, as noted in the rejection above, Petrie expressly discloses in col. 2, lines 50-56 that the first rupture members 23 break while the second rupture members 30 are still intact. Furthermore, since Petrie does not disclose the second rupture members as being unbreakable, they must then be breakable. As such, the second members 30 must break after the first members 23.

d. Applicant argues that Petrie fails to show the claimed invention because Petrie fails to show tension load. That may be so, but Petrie shows every structural limitation of the claims so if Petrie fails to include the structure that creates tension load, then so do the claims. Otherwise, if the claims do in fact recite all required structure, then Petrie must also show it because it shows all the limitations of the claims.

e. In response to applicant's argument that Mulquin shows offset load axis unlike the claimed invention, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Boratgis shows a tension decoupler.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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